

INVENTION: Method of Processing Wafers With Resonant Heating

ABSTRACT

A method of etching a wafer using resonant infrared energy and a filter to control non-uniformities during plasma etch processing. The filter includes a predetermined array or stacked arrangement of variable transmission regions that mirror the spatial etch distortions caused by the plasma etching process. By spatially attenuating the levels of IR energy that reach the wafer, the filter improves uniformity in the etching process. Filters may be designed to compensate for edge fast etching due to macro-loading, asymmetric pumping in a plasma chamber, and magnetic field cusping.